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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/407,544 | 09/28/1999 | RICHARD CWIAKALA | PO9-99-158 | 2890 |

7590 09/25/2002

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EXAMINER

PARK, ILWOO

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2182

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/407,544

Applicant(s)

CWIAKALA ET AL.

Examiner

Ilwoo Park

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Applicant's amendment filed on 7/3/2002 in response to Examiner's Office Action has been reviewed. Claims 1, 6, 14, 19, 27, 28, and 33 are amended and claims 41-47 are added. The following rejections now apply.
2. Claims 1-47 are presented for examination.
3. Maeurer et al was cited as prior art in the last office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeurer et al., US patent No. 5,301,323 in view of D'Errico, US patent No. 6,434,637.

As to claims 1, 14, 27, and 28, Maeurer et al teach a method of managing input/output (I/O) configurations of a computing environment, said method comprising:

selecting a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, said selecting being based on one or more characteristics associated with said channel path; and

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dynamically adjusting said I/O configuration using the selected channel path [col. 3, lines 47-65].

Though Maeurer et al teach the selecting is based on one or more characteristics associated with said channel path, Maeurer et al do not explicitly disclose the one or more characteristics include at least in part of an I/O velocity resulting from selecting the channel path.

D'Errico teaches [col. 14, lines 42-65] selecting a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, said selecting being based at least in part of an I/O velocity resulting from selecting the channel path.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Maeurer et al and D'Errico because they both teach selecting a channel path for balancing I/O workload and D'Errico's teaching of selecting being based at least in part of an I/O velocity resulting from selecting the channel path would increase accuracy in balancing I/O workload of Maeurer et al [D'Errico: col. 4, lines 47-62].

6. As to claims 2, 15, and 29, Maeurer et al teach attaching the selected channel path to a subsystem of said I/O configuration [table 1].

7. As to claims 3, 16, and 30, Maeurer et al teach said selected channel path and said subsystem are associated with a workload executing within at least one logical partition of said computing environment [col. 1, lines 24-31], and the dynamically adjusting provides additional resources [col. 2, lines 59-62] to said workload.

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8. As to claims 4, 17, and 31, Maeurer et al teach said selected channel path was removed from another workload executing within at least one logical partition, thereby reducing resources of said another workload [table 1].

9. As to claims 5, 18, and 32, Maeurer et al teach removing attachment of the selected channel path from a subsystem of said I/O configuration [table 1].

10. As to claims 6, 19, and 33, Maeurer et al teach said selecting is further based on at least one of an impact on response time to achieve specific workload goals [col. 3, lines 51-56], contention on a subsystem of said I/O configuration, availability characteristics of said channel path, and complexity of the resulting I/O configuration.

11. As to claims 7, 20, and 34, Maeurer et al teach determining that said I/O configuration is to be adjusted [col. 7, lines 3-4].

12. As to claims 8, 21, and 35, Maeurer et al teach determining comprises using one or more workload goals in making the determination [col. 7, lines 65-67].

13. As to claims 9, 22, and 36, Maeurer et al teach the one or more workload goals are associated with workloads of a group of partitions of said computing environment [col. 1, lines 24-31; col. 2, lines 50-52].

14. As to claims 10, 23, and 37, Maeurer et al teach determining comprises consulting with one or more workload managers of said computing environment in making the determination [col. 4, lines 37-41].

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15. As to claims 11, 24, and 38, Maeurer et al teach determining comprises using measured subsystem performance being within an average target range [table 1].

16. As to claims 12, 25, and 39, Maeurer et al teach projecting an impact of the adjustment on one or more subsystems to be effected by the adjustment, prior to said dynamically adjusting [col. 9, lines 22-26].

17. As to claims 13, 26, and 40, Maeurer et al teach dynamically adjusting when the impact is acceptable [col. 9, lines 22-26].

18. As to claim 41, D'Errico teaches said plurality of channel paths include one or more channel paths that can be added and one or more channel paths that can be deleted, and wherein the selecting comprises choosing the channel path from the plurality of channel paths which satisfies a best option, the best option taking into consideration the I/O velocity resulting from selecting the channel path, and wherein the selecting concurrently takes into consideration the one or more channel paths that can be added and the one or more channel paths that can be deleted [col. 4, lines 5-19; col. 9, line 45-col. 10, line 29].

19. As to claim 42, D'Errico teaches moving the selected channel path from one port to another port [col. 9, lines 39-49].

20. Claims 44, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeurer et al. as applied to claim 43 above, and further in view of D'Errico, US patent No. 6,434,637.

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As to claims 44, 46, and 47, reasons for rejection are set forth above for claims 1, 41, and 47, respectively.

Claim Rejections - 35 USC § 102

21. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

22. Claims 43 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Maeurer et al., US patent No. 5,301,323.

As to claim 43, Maeurer et al teach a method of managing input/output (I/O) configurations of a computing environment, said method comprising:

selecting a channel path from a plurality of channel paths to be used in adjusting an I/O configuration of said computing environment, said selecting being based on a plurality of characteristics; and

dynamically adjusting said I/O configuration using the selected channel path [col. 3, lines 47-65].

23. As to claims 6, 19, and 33, Maeurer et al teach said plurality of characteristics include at least one of an impact on response time, an impact on response time to achieve specific workload

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goals [col. 3, lines 51-56], contention on a subsystem of said I/O configuration, availability characteristics of said channel path, and complexity of the resulting I/O configuration.

Response to Arguments

24. Applicant's arguments filed 7/3/2002 for claims 43 and 45-47 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., I/O velocity) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication should be directed to Ilwoo Park, whose telephone number is (703) 308-7811 or via e-mail, *ilwoo.park@uspto.gov*. The Examiner can normally be reached Monday through Friday from 9:00 AM to 5:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jeffrey A. Gaffin, can be reached at (703) 308-3301.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7239 (for formal communications intended for entry),

(703) 746-7238 (for after-final communications),

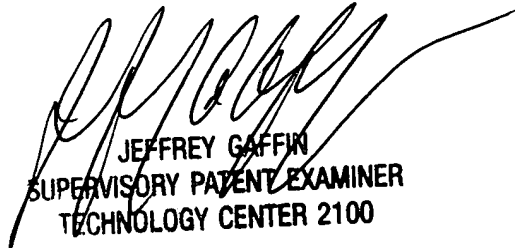
or:

(703) 746-7240 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington. VA., 4th Floor (Receptionist).



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100



Ilwoo Park

September 20, 2002